

BACUP

PUBLIC HEALTH ACT, 1875.

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# Annual Report

On the HEALTH of the

Urban Sanitary District of the Borough of Bacup  
during 1911,

BY

**JOHN BROWN, M.D., B.S., D.P.H., VICT.,**

**MEDICAL OFFICER OF HEALTH.**

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PRESENTED JANUARY, 1912.

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BACUP:

ALBERT BOOTH, PRINTER, KING STREET, AND ST. JAMES' STREET



# THE HEALTH COMMITTEE.

*Consists of the following Members :*

THE MAYOR (ex-officio)

Chairman—MR. ALDERMAN J. H. MADEN, J.P., C.C.

VICE-Chairman—MR. COUNCILLOR CROPPER, J.P.

MR. ALDERMAN CRABTREE

„ COUNCILLOR ASHWORTH

„ COUNCILLOR BARCROFT

„ COUNCILLOR BRIERLEY

„ COUNCILLOR GREENWOOD

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„ COUNCILLOR E. LORD

„ COUNCILLOR J. H. LORD

„ COUNCILLOR MORAN

„ COUNCILLOR J. SMITH

„ COUNCILLOR STEVENSON

„ COUNCILLOR WHITEHEAD

# MEDICAL OFFICER'S ANNUAL REPORT FOR 1911.

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*To the Mayor, Aldermen, and Councillors of the  
Borough of Bacup.*

GENTLEMEN,

I have the honour of presenting you with my thirty-fourth Annual Report on the Sanitary condition and Vital Statistics for the Borough of Bacup, for the year 1911.

The area of the Borough is 6120 acres, and the rateable value is £87,499.

## POPULATION.

At the last census in 1911, the population was 22,324 Males 10,599, Females 11,725; the inhabited houses, 5,572, uninhabited, 301; the average number of persons per house was 4. In 1901 there were 5,284 inhabited houses, the population being 22,504, which equals 4·2 persons per house. In 1911 with a decrease of 180 in the population, there were 288 more houses occupied, which shows that there has been less overcrowding. The population in the middle of 1911 is estimated at 22,400.

## BIRTHS.

During the year there were 414 births registered in the borough. The nett births were 417—males 227, females 190, of these, 15 were illegitimate—males 9, females 6. There were 3 transferable births, the birth-rate being 18·62. The

birth-rate for England and Wales for 1911 was 24·4. The natural increase in the Borough by excess of births over deaths was only 74.

It is the lowest natural increase of which we have any record. The birth-rate, too, is the lowest ever recorded. This is the third year in succession that we record a birth-rate below 20 per 1000. In 1878 there were 990 births, in 1911 only 417, being 573 less births.

#### DEATHS.

The deaths registered in the Borough were 316—males 168, females 148, equal to a gross annual death-rate of 14·11 per thousand. The corrected deaths were 343—males 182, females 161, equal to a death-rate of 15·3 per 1000. Of the 316 deaths registered in the Borough two were non-residents. There were 29 deaths of residents occurring outside the Borough, viz.: Haslingden Workhouse, 21; Rochdale Infirmary, 4; Lancaster County Asylum, 1; Whittingham County Asylum, 1; Winwick County Asylum, 1; Whitworth, 1.

The death-rate for England and Wales for 1911 was 14·6 per 1000.

The following table gives the nett mortality from all causes at the subjoined ages:—

Deaths under 1 year	...	...	...	46	} 75
„ above 1 year and under 2 years	...	...	...	18	
„ „ 2 „ „ 5 „	...	...	...	11	
„ „ 5 „ „ 15 „	...	...	...	18	} 268
„ „ 15 „ „ 25 „	...	...	...	13	
„ „ 25 „ „ 45 „	...	...	...	50	
„ „ 45 „ „ 65 „	...	...	...	104	
„ „ 65 „ and upwards	...	...	...	83	
Total				343	

## CAUSES OF DEATH AT ALL AGES.

Whooping Cough 6, Diphtheria and Membranous Croup 3, Typhoid Fever 3, Epidemic Influenza 5, Diarrhoea and Enteritis 10, Phthisis 21, Tuberculous Meningitis 8, Other Tuberculous diseases 4, Cancer 10, Rheumatic Fever 2, Bronchitis 33, Broncho-Pneumonia 17, Pneumonia (all other forms) 17, Appendicitis 1, Cirrhosis of Liver 2, Premature Birth 15, Diseases and Accidents of Parturition 6, Nephritis and Bright's disease 9, Violent Deaths 7, Suicides 3, All other causes 161.

## ZYMOTIC DISEASES.

The seven principal Zymotic Diseases caused 22 deaths, viz.:—Whooping Cough 6, Diphtheria and Croup 3, Typhoid Fever 3, Diarrhoea and Enteritis 10. The Zymotic death rate equals 0.98 per 1000. The Zymotic death rate for England and Wales for 1911 equals        per 1000.

The following Table gives the Zymotic deaths and death rate for the past 10 years:—

Year	Zymotic Deaths.		Zymotic Death Rate.
1902	...	17	0.75 per 1000
1903	...	53	2.35    „
1904	...	40	1.74    „
1905	...	10	0.44    „
1906	...	38	1.55    „
1907	...	26	1.06    „
1908	...	13	0.52    „
1909	...	29	1.17    „
1910	...	19	0.75    „
1911	...	22	0.98    „
		<hr/> 267	<hr/> 11.31    „

The averages for the years 1902—1911 equals 26 per year, and the average death rate equals 1.13 per 1000.

The following table gives the number of cases of Infectious Diseases notified during the past 10 years under the Notification Act :—

Year.	Smallpox	Diphtheria and Croup.	Erysipelas.	Scarlet Fever	Enteric Fever	Puerperal Fever.	Chickenpox.	Total.
1902	0	3	15	87	5	5	0	115
1903	43	7	5	115	16	1	0	187
1904	4	3	6	38	6	6	103	166
1905	0	2	25	38	4	6	65	140
1906	0	18	22	42	15	3	34	134
1907	0	3	15	19	3	1	61	102
1908	0	22	19	82	4	3	44	174
1909	0	7	26	58	45	2	86	224
1910	0	16	21	89	4	1	45	176
1911	0	21	11	10	5	0	25	72
Averages for Years 1902—1911	4.7	10.2	16.5	57.8	10.7	2.8	46.3	149.

The following Table gives the Monthly Returns of Infectious Diseases notified for the year 1911 :—

Month.	Smallpox	Diphtheria and Membranous Croup	Erysipelas	Scarlet Fever	Typhoid Fever	Puerperal Fever	Chickenpox	Total
January	...	3	4	...	2	...	...	9
February	...	2	...	...	...	...	...	2
March	...	1	...	1	1	...	...	3
April	...	4	1	1	...	...	...	6
May	...	2	1	4	...	...	1	8
June	...	2	...	...	1	...	1	4
July	...	1	2	...	1	...	...	4
August	...	...	2	...	...	...	...	2
September	...	1	...	...	...	...	...	1
October	...	3	...	1	...	...	2	6
November	...	...	...	1	...	...	12	13
December	...	2	1	2	...	...	9	14
Total	..	21	11	10	5	...	25	72

From the foregoing table it will be seen that there were 72 Infectious Diseases notified, of these 25 were Chickenpox. Excluding Chickenpox, there were only 47 cases. In the first Quarter, 14 cases; Second Quarter, 18; Third Quarter, 7; Fourth Quarter, 33.

### SMALLPOX.

Smallpox was not notified during the year. The Borough has been free from this disease since 1904. The Joint Hospital at Sourhall contains 32 beds. It is well equipped in every way, and always ready for the reception of patients. During the year I inspected the Hospital and found everything to my satisfaction.

### VACCINATIONS.

Through the kindness of Mr. A. A. Whitehead, B A., Vaccination Officer, I am able to give the following interesting statistics in regard to Vaccination for the past 14 years :—

Year	Successful Vaccinations.		Exemption Certificates.		Births	Deaths under 1 Year.		
1898	...	335	...	195	...	589	...	72
1899	...	364	...	114	...	543	...	89
1900	...	314	...	96	...	589	..	100
1901	...	364	...	89	...	485	...	69
1902	...	452	...	51	...	560	...	76
1903	...	494	...	59	...	548	...	77
1904	...	383	...	68	...	509	...	74
1905	...	372	...	91	...	503	...	56
1906	...	346	...	122	...	524	...	63
1907	...	242	...	147	...	541	...	69
1908	...	189	...	220	...	537	...	57
1909	...	214	...	234	...	479	...	66
1910	...	201	...	234	...	473	...	50
1911	...	143	...	239	...	414	...	46



## CHICKENPOX.

This disease has been notifiable since 1903. During the year 25 cases were notified 10 had been vaccinated and 15 were not vaccinated. One was an adult, aged 34. We took the precaution to have all in the house vaccinated, including the patient, who had not been vaccinated within seven years. The results were satisfactory. From past experience we have known cases of adults suffering from what has been diagnosed to be Chickenpox, which really were mild forms of Smallpox. Serious epidemics have occurred in many places in this way.

## SCARLET FEVER.

There were only 10 cases notified. There were no fatal cases. The disease was of a mild type. For over 25 years we have supplied to all patients "Carbolised Oil" for rubbing over the body, with most gratifying results. Dr. Milne, Medical Superintendent to Dr. Barnardo's Homes and Hospital, has strongly recommended the use of pure Eucalyptus Oil in the same way and swabbing the throat with Carbolised Oil. His results are very satisfactory. Many Medical Officers of Health are putting Dr. Milne's treatment to the test. Some have reported favourably on his method.

The following table gives the deaths for the past 10 years :

Year.		Deaths.		Rate per 1000.
1902	...	3	...	0·13
1903	...	7	...	0·34
1904	...	1	...	0·04
1905	...	2	...	0·08
1906	...	0	...	0·00
1907	...	0	...	0·00
1908	...	5	...	0·2

1909	...	2	...	0·08
1910	..	2	...	0·08
1911	...	0	...	0·00

### DIPHTHERIA.

During the year there were 21 cases notified. Three proved fatal. The case mortality being 14·2 per cent. The death-rate was 0·13 per 1000. There has been a great increase in the number of cases notified, the average for the past 10 years being 10·2 per year, against 21 for 1911. The average deaths for the past 10 years was 2·7 against 3 deaths for 1911, so that the death-rate for the cases notified is less, showing that the disease is of a milder type. For several years past, the Town Council has supplied Diphtheria Antitoxin Serum free for all patients in the Borough. In 8 cases Antitoxin Serum was used ; only one proved fatal. This case however, is not included in the 3 deaths. as the death occurred in 1912. In the 3 fatal cases no Antitoxin Serum was used. It is important to note that 15 cases occurred in children attending Day Schools.

### PENHOLDERS IN DAY SCHOOLS AS PROBABLE "DISEASE CARRIERS."

In 1908, I reported on the risks of diphtheria being spread by the indiscriminate use of pencils and penholders. During the past year we have had some cases of sore throats and diphtheria, probably due to this insanitary custom. On April 18th, I sent a letter to the Education Committee recommending that each child be supplied with a pencil case so that pencils, penholders, and books can be kept separate. A very cheap and suitable case is being made by a firm in the borough, and is being supplied to some of the classes. The danger of spreading various diseases in this way is being recognised. Dr. Sabourard of

Paris, says that "Perleche" is epidemic in schools, due to the habit of sucking penholders; Dr. Thresh, M.O.H., for Essex, has traced 17 cases of diphtheria to the indiscriminate use of penholders and pencils by school children; Dr. R. Milne, Medical Officer to Dr. Barnardo's Schools, read a paper at the British Medical Association's Meeting held in Birmingham, in which he condemned the indiscriminate use of pencils and penholders in our day schools in the strongest language. He stated that 95 cases of scarlet fever occurred in a few months through pen and pencil infections. He traced the spread of Scarlet Fever, Measles, Diphtheria, and Tuberculosis to this "atrocious abomination."

In a memorandum to Medical Officers of Health and School Medical Officers for Prevention of the spread of Infectious Diseases occurring among children attending Public Elementary Schools, issued September, 1909, by the Local Government Board, there occurs the following:—

"A special caution may be given as to the risk arising from moistening slates with saliva, or from the use in common of penholders and pencils, which are apt to be put in the mouth, and steps should be taken to avoid this."

The habit is insanitary even if no serious infection has been proved, and therefore should be abolished.

The following table gives the deaths for the past 10 years:—

Year		Deaths.		Rate per 1000.
1902	...	1	...	0·04
1903	...	6	...	0·26
1904	...	1	...	0·04
1905	...	2	...	0·08

1906	...	8	...	0.32
1907	...	1	...	0.04
1908	...	1	...	0.04
1909	...	3	...	0.12
1910	...	2	...	0.08
1911	...	3	...	0.13

## MEASLES.

There were no deaths registered. We have had no epidemic since 1909 when there were 14 deaths.

The following table gives the deaths for the past 10 years :—

Year.		Deaths.		Rate per 1000.
1902	...	5	...	0.22
1903	...	30	...	1.38
1904	...	6	...	0.26
1905	...	0	...	0.00
1906	...	20	...	0.82
1907	...	14	...	0.57
1908	...	4	..	0.16
1909	...	14	...	0.56
1910	...	0	...	0.00
1911	...	0	...	0.00

## WHOOPIING COUGH.

There were 6 deaths, all under 2 years of age. We have had no serious outbreak since 1904.

The following table gives the deaths for the past 10 years :—

Year.		Deaths.		Rate per 1000.
1902	...	4	...	0.17
1903	...	2	...	0.08
1904	...	24	...	1.04
1905	...	3	...	0.13

1906	...	0	...	0·00
1907	...	8	...	0·32
1908	...	1	...	0·04
1909	...	1	...	0·04
1910	...	8	...	0·32
1911	...	6	...	0·27

### ENTERIC OR TYPHOID FEVER.

There were 5 cases notified, and three proved fatal. All the cases were inquired into but no local cause could be ascertained to account for them. The case mortality was 60 per cent, which shows that they were of a severe type. The death-rate was 0·13 per 1000.

The following table gives the deaths for the past 10 years :—

Year.		Deaths.		Rate per 1000.
1902	...	1	...	0·04
1903	..	5	...	0·22
1904	...	3	...	0·13
1905	...	0	...	0·00
1906	...	1	...	0·04
1907	...	0	.	0·00
1908	...	0	...	0·00
1909	...	5	...	0·2
1910	...	2	...	0·08
1911	...	3	...	0·13

### DIARRHŒA AND ENTERITIS.

There were 10 deaths registered, 5 under five years and five over five. The death-rate equals 0·45 per 1000. During the year epidemic diarrhœa was not prevalent. There were only 3 deaths under one year. The house fly has been condemned as the chief cause of infantile diarrhœa. Our experience does not bear out this as the

source of the disease. In one part of the borough where the "Fly" nuisance has been the worst, there have been no deaths from diarrhoeal diseases for several years past. They have been a nuisance as filth *carriers* and *irritants*. Wherever the ground temperature is high you have infantile epidemic diarrhoea. The conditions which favour the high ground temperature also favour the multiplication of flies. The presence of flies is an indication that decaying organic matter is present and should be removed. Horse manure is one of the best breeding places for flies, and should be removed weekly. Where this is difficult, then a few fowls, about 5 for each horse will effectually prevent the "Fly Nuisance."

The following table gives the deaths for the past 10 years :—

Year.		Deaths.		Rate per 1000.
1902	...	2	..	0·08
1903	...	3	...	0·13
1904	...	4	...	0·17
1905	...	3	...	0·13
1906	...	9	...	0·36
1907	...	3	...	0·12
1908	...	4	...	01·6
1909	...	4	...	0·16
1910	..	5	...	0·2
1911	..	10	...	0·45

#### PUERPERAL FEVER.

There were no cases notified.

#### OPHTHALMIA NEONATORIIUM.

During the year the Local Government Board have sanctioned the addition of Ophthalmia of the Newborn as a Notifiable Disease under the Infectious Diseases (Notification)

Act. We have not had any cases notified. Provision has been made for the medical treatment where the parents are unable to pay. We have two Queen's Nurses who have rendered valuable service in cases of this kind and they would do so again if needed.

### REMARKS ON OTHER DISEASES.

PHTHISIS—There were 21 deaths: 15 died in the Borough and 6 outside, viz.: 3 in the Workhouse and 3 in Asylums. The death-rate equals 0.94 per 1000. In our crowded towns the Tubercle Bacilli are everywhere. Its victims are found amongst the poor. When the submerged tenth and those on the border line are raised to a higher standard of vitality and healthy surroundings, this Disease will rapidly decline. The healthy and strong easily resist the Bacilli. For several years past we have noted the rental of the houses where Phthisis finds its victims. Last year there were 15 deaths in the Borough, occurring in 15 houses, not one of which had a rent above 5/- per week. The wealthy and the residents of Villadom but rarely fall a victim to Pulmonary Tuberculosis; if so, it is too often due to Alcoholism and dissipation. The Public Health (Tuberculosis) Regulations, 1911, make Pulmonary Tuberculosis compulsorily notifiable. It also gives "Powers and Duties" to local Authorities to do a great deal towards the prevention and treatment of this disease. Under the "National Insurance Act," it is proposed to make 1½ million pounds available for providing Sanatoria and other Institutions for the treatment of patients. The chief object, however, is to prevent the disease by doing all that is possible in regard to overcrowding; and in cases where the wage-earner's income is absorbed, due to a family of young children, and he cannot live in a house necessary for the health of the family, extra money might be provided without pauperising, until the children are able to work. In this way much could be done to bring up a healthy family.



The Public Health (Tuberculosis) Regulations, 1908. We received 8 notifications. Under Form A, 4 cases; Form B, 4. All in the Borough were visited.

The following table gives the deaths for the past 10 years :—

Year.	Deaths.	Rate per 1000.
1902	27	1·2
1903	26	1 15
1904	16	0·69
1905	23	1·02
1906	16	6·5
1907	22	0·87
1908	22	0·87
1909	14	0·56
1910	23	0·92
1911	20	0·9

OTHER TUBERCULAR DISEASES.—There were 12 deaths : 8 under 5 years, and 4 over 5 years of age.

#### “SHUTTLE-KISSING” AND ITS RISKS.

The Report from the Home Office has not yet been published. No doubt it has been delayed owing to the death of Dr. Bulstrode, who was conducting the enquiry. That the custom is insanitary is beyond question ; that it may be the means of conveying infection cannot possibly be doubted. In fact, in South America in many of the Cotton Mills where Phthisis was common amongst the weavers, “Shuttle-kissing” was suspected of conveying the disease. For several years past this insanitary method has been abolished, and hand-threading shuttles substituted. Since we began this inquiry, the legislation in the State of Massachusetts has passed a law for the abolition of “Shuttle-kissing,” which comes into force in



May next. There are many Shuttles on the market which can be hand-threaded. Several Manufacturers in the Borough, and in other parts of Lancashire are testing these Shuttles with a view to abolishing "Shuttle-kissing," and we are hoping that when the Report is published by the Home Office practical steps will be taken to abolish "Shuttle-kissing" in Lancashire. During the year we have disinfected Shuttles which had been used by a Phthisical weaver. In one case, the weaver, who died, had recently worked in three different weaving sheds in the Borough. We made inquiries and disinfected the Shuttles which had not been destroyed. No Bacteriological examination of the Shuttles for the Bacillus Tuberculosis has been made so far as we know.

## RESPIRATORY DISEASES.

These include Bronchitis, Broncho-Pneumonia, and Pneumonia (all other forms). There were 67 deaths, 24 under 5 years and 43 over 5 years of age. The death-rate equals 2·99 per 1000.

The following table gives the deaths for the past 10 years:—

Year.		Deaths.		Rate per 1000.
1902	...	86	...	3·82
1903	...	92	...	4·08
1904	...	76	...	3·22
1905	...	66	...	2·93
1906	...	83	...	3·4
1907	...	95	...	3·87
1908	...	61	...	2·48
1909	...	66	...	2·68
1910	...	61	...	2·6
1911	...	67	...	2·99

## INFLUENZA.

There were 5 deaths registered. This disease did not assume an epidemic character; only 2 died in the Borough, the other 3 died in the Workhouse.

The following table gives the deaths for the past ten years :—

Year.		Deaths		Rate per 1000.
1902	...	2	...	0·08
1903	...	2	...	0·08
1904	...	6	...	0·26
1905	...	1	...	0·04
1906	...	2	...	0·08
1907	...	1	...	0·04
1908	...	10	...	0·4
1909	...	7	...	0·28
1910	...	2	...	0·08
1911	...	5	...	0·22

## CANCER AND MALIGNANT DISEASE.

There were 10 deaths registered, which equals 0·45 per 1000. In the previous year 18 deaths were registered. There were 9 deaths in the Borough and 1 in the Workhouse. After many years of research work in this and other countries no cure has been discovered. Early diagnosis and removal of the cancerous growth is most important. In some cases this has been successful.

## INFANTILE MORTALITY.

There were 46 deaths under one year, which equals a death-rate of 111 per 1000 births. In England and Wales for 1911 it was 130 per 1000 births. Of the 46 deaths only 2 were illegitimate. The Infantile Mortality is fairly satisfactory for a manufacturing town. Many of the mothers have to go

to the mill, as a result of which the children have not the care and attention that those have who are brought up in towns where there is little or no women's out-door work. There were 11 deaths from Respiratory diseases, and 18 from Premature Birth, Atrophy, Debility and Marasmus. We have had cards on the "Feeding and care of Infants," also leaflets on "How to bring up a Baby." By the kindness of the Registrar, Mr. Edgar Smith, these are given to parents when registering births. A lady Visitor would be able to give valuable instruction. We have two "Queen's Nurses" who render most valuable services to the sick poor. Their services have an educative value in matters relating to Sick-nursing and domestic Hygiene.

### GENERAL REMARKS.

The Physical and Geographical conditions have been stated in previous reports.

The chief occupations are various branches of the cotton industry, brick-making, stone quarries, collieries, and slipper works. The men employed in the stone quarries are liable to accidents. Those who work underground are liable to chronic bronchial affections and to fibroid phthisis.

HOUSE ACCOMMODATION.—From the 1911 Census it will be seen that we have ample house accommodation. There were 301 empty houses. The number of persons per house is the lowest ever recorded. There is very little overcrowding; the number of persons per house was only 4 against 4.2 in 1901. In 1901 the population was 22,504; inhabited houses, 5,284. In 1911 the population was 22,324, and the inhabited houses, 5,572; that is 288 more houses occupied with 180 less persons. Owing to the depressed state of the Cotton trade, and the stationary condition of the population, new houses have not been built to the extent that we should like. There are two

building estates waiting to be covered with modern houses. Many of the old houses have been improved with regard to light and sanitary arrangements. We have a great many back-to-back houses ; they are well built, and many of them have larger rooms and more cubic space than some of the new houses that are erected.

**WATER SUPPLY.**—The New Reservoir at Cowpe has been completed. During the year the Water Engineer has been very busy connecting houses to the Mains. The Corporation supplies about 14,000 people, and about 8,000 are supplied from private sources. Some of the latter have a good supply, but with others it is suspicious, being liable to pollution from surface washing from manured fields. These are being dealt with as they are reported.

During the long spell of hot weather, when many parts of the country had to cut off the supply for several hours per day, Bacup had an abundant and continuous supply of most excellent water.

**LEAD-POISONING** —There have been no cases of Lead-Poisoning, in connection with the Corporation Water Supply.

**DAIRIES, COWSHEDS AND MILKSHOPS** —We have 120 Cow-keepers and Milksellers. Their premises have been inspected and several improvements effected. Six applications for registrations were received and were granted.

**SLAUGHTER HOUSES.**—There are 16 on the Register. These have been regularly visited and have been found to be in a fairly satisfactory condition. Some are not structurally adapted for the purpose. A Public Abbatoir would be the best remedy.

**INSPECTION OF MEAT.**—The Market ground has been visited regularly. There were 500lbs of meat destroyed.

SEWERS.—The Borough is well drained and sewered. The Sewerage is treated at the Joint Outfall Works at Ewood Bridge by Chemical precipitation, land filtration, coke breeze filters and sprinklers.

OFFENSIVE TRADES.—There are 3 tripe boilers, and one knacker's yard. These premises were kept in a satisfactory condition.

CONVERSION OF CLOSETS.—FREE WATER should be provided for W. C's, converted from the pail system. For several years we have recommended that all houses should have free water for one closet per house. The conversion of pail closets to water closets was hindered by the charge of 4/- per year. From the 1st of April, 1911, water is supplied free, also a sum not exceeding £2 for the conversion of pail closets to water closets is allowed. This will greatly facilitate the conversions.

REMOVAL AND DISPOSAL OF HOUSE REFUSE.—This work is done almost entirely by our own scavengers. On the whole it is well done. It is removed weekly and deposited on tips in various parts of the Borough. A Refuse Destructor would be one way of dealing with this question. We have a great deal of moorland where tips would be no nuisance, but there is a difficulty in getting good roads to the moors. If this could be done at a reasonable cost, it would be found far cheaper than a Destructor.

HOUSING AND TOWN PLANNING ACT, 1909 AND HOUSING (INSPECTION OF DISTRICT) REGULATION, 1910.—Twenty-one houses have been reported on and recommendations made. It was resolved that the Health Committee view the property.

SCHOOLS.—All the Elementary Day Schools have been inspected. The Sanitary condition is fairly satisfactory. In my previous reports I have recommended the four schools where there are pail closets that they be converted to the water-carriage system. One school has made arrangements for their conversion and the work will soon be proceeded with. It is most desirable that there should be no undue delay in the other three schools abolishing the pail closets.

There are 11 schools, with 17 departments. During the year none of the schools have been closed for infectious diseases.

The schools, have been disinfected by spray. Sanitary sawdust and liquid disinfectants have been supplied.

ISOLATION HOSPITAL.—The proposal for a Joint Infectious Hospital for the three Rossendale Boroughs is still in abeyance. Dr. Manby paid us a visit and strongly recommended that we should take action in the matter. The Council has done so and arrangements have been made with the Burnley Joint Hospital Board to take our infectious cases.

STEAM DISINFECTOR AND CLEANSING STATION.—Through the generosity of Alderman J. H. Maden, we have one of the best equipped Steam Disinfector and Cleansing Stations in the country. It has proved of great service. It has been used five times since it was opened in February: six verminous cases were treated, their clothes were disinfected, also bedding, mattresses and other articles have been disinfected, 71 in all.

THE COMMON LODGING HOUSES.—These are dealt with by the Chief Constable; his report thereon is annexed.



NOTIFICATION OF BIRTHS ACT, 1907.—This Act has not been adopted. If it were it would be necessary to appoint a lady visitor or nurse if the purposes of the Act were to be of practical value.

ANTHRAX.—One case of anthrax in a cow was notified by the Chief Constable. The diseased carcass was burnt and the cowshed disinfected.

SMOKE NUISANCE.—During the year 40 observations have been taken: 38 for half an hour and 2 for one hour. The average duration of black smoke was  $2\frac{1}{2}$  minutes per half-hour for 38 observations. For the two chimneys of one hour observations, the average was  $9\frac{1}{2}$  minutes for the hour. The highest was 16 minutes in the hour. There is no doubt that there is great carelessness in firing. The air is greatly polluted and there is a waste of fuel.

MEAT POISONING.—During the year we have had two outbreaks of meat poisoning. The first was a serious one and the worst I have known during my thirty-four years experience as Medical Officer of Health in Bacup. As I have issued a special report, including the results of the bacteriological examinations which were carried out at the Public Health Laboratory, Manchester, I shall only give a brief outline of the chief facts. The report was sent to the Local Government Board, The County M.O.H. for Lancashire, and to each member of the Town Council.

#### EXTRACT FROM REPORT.

“On Saturday evening, June 10th, Dr. J. Percival Brown informed me that he had under his treatment some cases of illness having all the clinical symptoms of Ptomaine Poisoning, and he believed these were due to eating potted meat and roast pork. On the following

day I visited one house where there were 6 cases, also another house where there were 3. The following day, Monday, I heard of other doctors having cases of a similar nature, and they were confirmed in the opinion that these were due to the meat supplied from one particular shop. The Sanitary Inspector (Mr. Barnes) and myself went to the shop and inspected the premises. The butcher and his sons gave us facilities in our inspection, and detailed information on the methods of preparation of the meat. The shop and preparation room were clean. A doorway had been made from the latter direct into the stable. The stable itself was divided by a wooden partition, that part next to the preparation-room being used as a cooling-room; the other to stable a horse. In the loft above, pigeons were kept. In the cooling-room on the floor, there were 6 pots of brawn and a hock of beef hung up. The floor was paved with ordinary setts, the joints not cemented. An open channel went through to the stable. There was about 38lbs. of brawn; the butcher gave a written order to Mr. Barnes for this and the hock of beef to be destroyed, which was done, except one pot of brawn which was sent to the Public Health Laboratory, Manchester, for bacteriological examination. The doorway was built up the same day. Close to the door of the preparation-room, a dog was kept in a wooden kennel and in the back-yard opposite is a wash-house; three pail closets and a horse-manure heap were within 8 yards.

#### EXTENT OF THE OUTBREAK WITH REMARKS ON SYMPTOMS.

This is the most severe and extensive outbreak that has occurred in Bacup since my appointment as Medical Officer of Health—1877. The symptoms were those



usually associated with bacterially affected food, and generally called "Ptomaine Poisoning." The vomited matter in nearly all cases was green: the fæces very offensive. In some cases there was feverishness with intense thirst and dry tongue. The temperature varied from 100° to 104°. Some had marked delirium and nervous symptoms. In a few cases there were skin rashes. Dr. Oliver, of Oldham, had two patients, one of whom had herpes of the lips and nose, the other had herpes which extended from the ear to the nose and lips, following the branches of the facial nerve. Dr. Shaw and Dr. J. Percival Brown had similar cases chiefly confined to the lips and nose. Several patients suffered from collapse and great prostration. On trying to get out of bed, they found that their legs were too weak to support the body, and they fell on to the floor. The recovery in some cases was very slow, and in a few there is still (August 21st) a tendency to diarrhœa. There was a period of incubation which was generally free from any discomfort. Some persons who had partaken of the meat for tea, left the same night for Blackpool, Rochdale and other places for their holidays, and were taken ill with acute symptoms, which their doctors at once attributed to food-poisoning. This period of incubation varied considerably: it was impossible to get the exact time in 213 cases. In 155 we got a closely approximate time between the consumption of the meat and the on-set of the gastro-enteric symptoms. The incubation period was as follows for the 155 cases:—

Under 4 hours	...	...	...	8 persons.
4 hours and under 8 hours	...	...	...	37 „
8 „	„	12 „	...	31 „
12 „	„	16 „	...	30 „
16 „	„	20 „	...	30 „
20 „	„	24 „	...	11 „

24 hours and under 36 hours	...	5	persons
36 „ and over	... ..	3	„
Total	...	<u>155</u>	

It would appear that the more serious cases occurred when the meat was partaken of at tea or supper. In these, the period of incubation was shortest, no doubt due to the small amount of food usually taken at these meals, which might account for the more rapid absorption of the toxins and baccilli into the system. When taken at dinner-time, the incubation period appears to have been longer and the illness less severe.

#### THE NUMBER OF PERSONS AFFECTED.

There were 213 cases notified by 14 doctors. We have reason to believe there were others who did not come under the notice or medical care of doctors. Of these, 105 were males and 108 females. 196 were residents in the Borough and 17 were non-residents. It being Bacup Fair and holiday-time, some of these were visitors from Oldham, Rochdale, and Whitworth. We feared that there might be many visitors from neighbouring towns, who would be affected on their return to their homes, and accordingly sent letters to the Medical Officers of Health of the surrounding districts, but only the 17 cases were reported.

#### AGES OF PERSONS ATTACKED.

Under 1 year	...	...	...	...	1
1 and under 5 years	...	...	...	...	8
5 „ „ 15 „	...	...	...	...	39

15 and under 25 years	...	...	...	36
25 „ „ 65 „	.	...	...	115
65 years and upwards	...	...	...	14
			Total	<u>213</u>

180 cases after consumption of potted meat (Brawn).

33 „ „ „ „ Roast Pork.

CASES OF FOOD POISONING occurred in 101 households: In three houses 6 persons were attacked; 5 in 2 houses: 4 in 9 houses; 3 in 19 houses; 2 in 24 houses; in 44 houses, one person in each house.

### VIRULENCY.

We ascertained that 216 persons partook of the suspected meat, and only THREE persons escaped without any symptoms of malaise, head-ache, vomiting, and diarrhoea. Less than half-an-ounce seems to have given rise to the characteristic symptoms,—severe abdominal pains, vomiting, and profuse diarrhoea with great prostration.

The first case came under medical notice about 5 p.m. on June 6th, and was attributed to the consumption of “pork scraps” at 8 a.m. of the same day. On the 8th and 9th, the attacks were more numerous and were attributed to potted meat and roast pork obtained from a certain pork butcher, or from shops supplied by him. The potted meat in question was prepared on Monday, June 5th, and Wednesday, June 7th, and the pork was roasted on June 6th. The batches of cooked food proved poisonous. The potted meat caused more attacks than

the roast pork, this being possibly due to the amount of food cooked, the place of storage and degree of contamination. The potted meat made on Monday, June 5th, is said to have been sold prior to the evening of Wednesday, June 7th, when there was a second cooking of what also proved to be infected meat.

Of the five deaths which took place (including the suicide of a man while suffering from symptoms of food poisoning) all were due to the potted meat, and in four instances the affected food was reported to have been purchased directly from the shop at which it was prepared, and in the 5th death the place of purchase could not be definitely defined.

The cause of this food infection has not, so far, been satisfactorily elucidated, and in this respect it does not differ from similar occurrences in the County of Lancashire during the past few years. One improper condition, however, existed on the suspected premises at the time of the outbreak, which must be received with the greatest suspicion. It appears that the shop-keeper in order to provide a cooling place for his cooked food, made an entrance from his cook-house into an adjoining, stable by breaking through a partition wall, and in this place, which had a loft above containing pigeons, and was separated by a wooden partition from another part of the premises used as a stable for one horse, all the suspected food in question was cooled, except the roast pork, which, it is stated, was stored in the cook-house, and therefore partially under the influence of the stable air until removed to the shop next day.

The investigations carried out in respect of this and other outbreaks, show that the infection of certain foods

by the bacillus Enteridis (Gaertner) is difficult to guard against, and as the public has often no means of protection either by the APPEARANCE of the food, or the senses of TASTE and SMELL, the more efficient care should be taken to prevent the possibility of food contamination by insanitary conditions, either in or around buildings used for the preparation of food. Not one person of the 216 who partook had the SLIGHTEST IDEA that the food was infected. The 3 senses which usually act as sentinels for the stomach were unable to detect anything wrong. Persons who entered the shop to buy other goods bought potted meat because it looked "tasty." One person bought  $\frac{1}{4}$ -lb for tea, when three persons partook of it, and all were made ill.

### EXAMPLES OF CASES.

The following cases are worth reporting, since they provide the strongest evidence for indicting the potted meat and roast pork as the agents responsible for the illness.

1. On June 7th, Mr. S. purchased  $\frac{1}{4}$ -lb. of potted meat. Three out of four persons partook of the same at 10 p.m. About 4 a.m. June 8th, the three were ill with headache, diarrhœa, and vomiting. The one who had none escaped.

2. On June 8th, Mr. B. and his family of 6 persons partook of  $\frac{1}{2}$ -lb. of potted meat, All were taken ill the following day.

3. On June 7th, Mrs. A. and family of four persons partook of potted meat, and all were made ill.

4. On June 7th, Mrs. C. and family partook of potted meat. All were taken ill.

5. On June 10th, Mrs. C. and visitors (5 persons) partook of  $\frac{1}{2}$ -lb. of potted meat. All were made ill. One visitor was so ill that she was expected to die.

6. On June 8th, Mr. M. and family consisting of 6 persons partook of  $\frac{1}{2}$ -lb. of potted meat, and were taken ill with the usual symptoms of Ptomaine Poisoning.

7. On June 8th, Mr. W. and family of 5 persons partook of potted meat and were made ill.

8. On June 8th, Mr. B. and 4 others partook of  $\frac{1}{2}$ -lb. pound of potted meat. All five were made ill. The other members of the family who did not eat escaped.

#### DIARRHOEAL ILLNESS.

Amongst the family of the butcher we made enquiries if any of the family engaged in the preparation of and sale of the meat had suffered from any kind of diarrhoeal disease, but they had not.

#### CAUSE AND ORIGIN OF OUTBREAK.

The cause of the outbreak is due to a bacillus allied to the *Bacillus Enteridis* of Gaertner. This is commonly regarded as an excretal organism. In the report of Dr. Sellers, this particular bacillus was found in the organs of three persons who died from Food Poisoning, also the blood taken from two patients, both of whom have recovered.

#### POSSIBLE SOURCES OF CONTAMINATION.

The preparation room was clean. The nearest sources of contamination would be the stable and the part used



for cooling room, the 3 pail closets and the manure heap. Possibly, if any pig had been suffering from an infection of the alimentary canal, in the course of preparing, the meat used might be infected; or anyone engaged in the preparation suffering from diarrhoeal disease, or having recovered, being a carrier, might contaminate the food. From careful enquiries we may exclude this source.

That the food caused the outbreak is beyond question, but the definite cause has not been satisfactorily elucidated. It is a matter for regret that we were unable to secure any of the meat from the purchasers, only small quantities having been bought for immediate consumption.

The outbreak was caused by contamination of the food with a certain bacillus. This organism belongs to a class usually associated with epidemics of meat poisoning. There was no reason to believe that the swine were diseased. In the blood and organs of the three fatal cases a bacillus was found which is associated with meat poisoning.

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## NO. 2 OUTBREAK OF MEAT POISONING.

This outbreak occurred in October. Dr. Helme, of Waterfoot telephoned to me on October 14th that he had 4 cases of food poisoning in one house, and that he believed it was due to having partaken of some roast pork bought at a shop, which was supplied by a pork butcher in Bacup. We visited this shop and took possession of 2½lbs. of roast pork, the remains of a leg of stuffed pork. At the time of our visit, the shopkeeper himself was ill, having partaken of a small portion. We got a list from 5 shop-

keepers of persons who had bought pork. In all, there were 42 persons, of these 38 had been more or less ill. Happily none proved fatal. The type of the disease was less virulent. All recovered.

The roast pork came from the same shop as in No. 1 outbreak. There was no evidence of any disease in the 5 pigs. The other parts of the pigs were sold and no unpleasant results followed. From enquiries which we made, we found that one person who was engaged in the previous outbreak (and in this also) in preparing the legs by boneing them, also had been engaged in gut-scraping. Gut-scraping is an offensive trade, and there are none licensed in the Borough. It appears that two butchers cleaned guts weekly, and one occasionally, for their own use. The Town Council instructed the Town Clerk to send a letter to all the butchers in the borough, that gut-scraping cannot be permitted except in properly registered places, and that those engaged in it should have nothing to do with the preparation of meat. This was done, and gut-scraping has been stopped.

Specimens were sent to the Public Health Laboratory, Manchester, for bacteriological examination: portions of roast leg of pork, urine, fæces, 3 specimens of blood, board used for scraping intestines, also scrapings from this board. A full report was published and sent to the Local Government Board, Dr. Sargent, and to each member of the Town Council.

The results may be summed up as follows: The characters of the bacteria isolated from the meat, the stuffing, scrapings of board and fæces showed that all of them belonged to the group of bacteria usually associated with meat poisoning. They differed from each



other in certain respects and cannot be regarded as identical organisms. One of them was agglutinated by two specimens of blood of patients.

The bacteriological evidence supports the view that the contaminated pork was the cause of the outbreak.

SUMMARY OF THE WORK OF  
THE SANITARY INSPECTOR, MR. A. E. BARNES,  
A. M. R. S., INST., UPON HIS REPORT  
RESPECTING MATTERS DEALT WITH.

Visits and Re-visits to Houses	...	...	...	1703
Notices and Letters served	...	...	...	593
Workshop Inspections	...	...	...	139
Slaughter Houses and Offensive Trade Inspections				426
Cowshed Inspections	...	...	...	136
Rooms disinfected, including Schools, etc.			...	136
Drains Tested (by Smoke)	...	...	...	44
Complaints Received	...	...	...	59
Visits paid to Infected Houses	...	...	...	171
Smoke Observations	...	...	...	40

NUISANCES ABATED.

Foul Drains	...	...	...	33
Pail Closets Abolished (Water Closets provided)				93
Dirty Closets to Cleanse	...	...	...	31
Insufficient Ashpits (Ashbins provided)			...	135
Dirty Dwellings to cleanse	...	...	...	17
Defective Drains under buildings	...	...	...	17
Dilapidated Spouting and Fall Pipes	...	...		28

Fall Pipes disconnected from Drains	...	...	10
Defective Sink Waste Pipes	...	...	14
Premises Overcrowded	...	...	3
Dilapidated Bedroom Floors	..	...	4
Dilapidated House Roofs	...	...	17

Further details of nuisances abated will be found in Mr. Barnes's Report which is annexed.

#### MEAT AND FOOD INSPECTION.

The Market Ground has been visited regularly, also frequent inspections of shops and premises where food is exposed for sale or prepared for sale. In all cases the food has been destroyed. The following has been condemned as unfit for human consumption:—

Roast Pork...	...	...	...	2½lbs.
Potted Meat	...	...	..	40lbs.
Tripe...	...	...	...	50lbs.
Beef and Pork	...	...	...	120lbs.
Liver...	...	...	...	40lbs.
Carcase of One Pig	...	...	...	240lbs.



*Annual Report of the Medical Officer of Health for the year 1911, for the Borough of Bacup on the administration of the Factory and Workshop Act, 1901, in connection with Factories, Workshops, Laundries, Workplaces and Homework.*

### 1.—INSPECTION.

Including Inspections made by Sanitary Inspector.

Premises.	Number of		
	Inspections.	Written Notices	Prosecutions
Factories ... .. (including Factory Laundries)	11	5	...
Workshops ... .. (including Workshop Laundries)	124	12	...
Workplaces ... .. Other than Outworkers' premises included in Table 3).	4	...	...
Total... ..	139	17	...

## II.—DEFECTS FOUND.

Particulars.	Number of Defects			Number of Prosecutions
	Found	Remedied	Referred to H.M. Inspector	
<i>Nuisances under the Public Health Acts :</i>				
Want of Cleanliness ... ..	4	4	...	...
Want of Ventilation ... ..	...	...	...	...
Overcrowding ... ..	...	..	...	...
Want of drainage of Floors ... ..	..	...	...	...
Other Nuisances... ..	10	10	...	...
Sanitary Accommodation {	Insufficient ... ..	...	...	...
	Unsuitable or defective ... ..	14	13	...
	Not separate for sexes ... ..	...	...	...
<i>Offences under the Factory and Workshop Act :—</i>				
Illegal occupation of Underground Bakehouse ... ..	...	...	...	...
Breach of Special Sanitary Requirements for Bakehouses ... ..	...	...	...	...
Other Offences ... .. (Excluding offences relating to outwork which are included in Table 3). ... ..	...	...	...	...
Total ... ..	28	27	..	...

## III.—REGISTERED WORKSHOPS.

Workshops on the Register at the end of the year...	120
Total Number of Workshops on Register ..	120

## V.—OTHER MATTERS.

Class.	Number
Matters notified to H.M. Inspector of Factories :—	...
Failure to affix Abstract of the Factory and Workshop Act ... ..	...
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act.	<div> <div>Notified by H.M. Inspector ...</div> <div>Reports of (action taken) sent to H.M. Inspector</div> </div>
Other ... ..	...
Underground Bakchouses :—	
Certificates granted during the year ... ..	...
In use at the end of the year ... ..	...

I am, Gentlemen,

Yours obediently,

JOHN BROWN, M.O.H.,

M.D., D.P.H., Vict. Univ.

*Burwood House, Bacup,  
January 25th, 1912.*

Nature of Work.	Outworkers' Lists.			
	Lists received from Employers.			
	Twice in the Year.		Once in the Year	
	Lists	Out-Workers	List	Out-Workers.
Wearing Apparel—				
(1) making, &c. ... ..	3	1	...	...
(2) cleaning and washing...	...	...	...	...
Household Lincn ... ..	...	...	...	...
Lace, Lace Curtains and Nets ...	...	...	...	...
Curtains and Furniture Hangings ...	...	...	...	...
Furniture and Upholstery ... ..	...	...	...	...
Electro Plate ... ..	...	...	...	...
File making ... ..	...	...	...	...
Brass and Brass Articles ... ..	...	...	...	...
Fur pulling ... ..	...	...	...	...
Cables and Chains ... ..	...	...	...	...
Anchors and Grapnels ... ..	...	...	...	...
Cart Gear ... ..	...	...	...	...
Locks, Latches, and Keys ... ..	...	...	...	...
Umbrellas, &c. ... ..	...	...	...	...
Artificial Flowers ... ..	...	...	...	...
Nets, other than Wire Nets ... ..	...	...	...	...
Tents ... ..	...	...	...	...
Sacks ... ..	...	...	...	...
Racquet and Tennis Balls ... ..	...	...	...	...
Paper Bags and Boxes... ..	...	...	...	...
Brush making ... ..	...	...	...	...
Pea Picking ... ..	...	...	...	...
Feather sorting ... ..	...	...	...	...
Carding, &c., of Buttons, &c....	...	...	...	...
Stuffed Toys ... ..	...	...	...	...
Basket making ... ..	...	...	...	...
Total... ..	3	1	...	...



TABLE 1.—VITAL STATISTICS OF WHOLE DISTRICT DURING 1911 AND PREVIOUS YEARS.

Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICTS.		TRANSFERABLE DEATHS		NETT DEATHS BELONGING TO THE DISTRICT.			
	Population estimated to Middle of each Year.	NETT		Number	Rate	of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 year		At all Ages	
		Uncor-rected Number	Num-ber					Rate	Number		Rate per 1000 Births
1906	24400	524	524	371	15.2	..	..	63	120	371	15.2
1907	24500	541	541	385	15.71	..	23	69	127	407	16.61
1908	24600	537	537	360	14.63	3	19	56	104	376	15.27
1909	24600	479	479	361	14.67	4	27	64	133	384	15.61
1910	24600	473	473	349	14.71	..	20	50	105	369	14.72
1911	22400	414	417	316	14.11	2	29	46	111	343	15.3
Area of District in Acres (ex-clusive of Area covered by Water.			Total Population at all ages.			Number of Inhabited houses			Average number of persons per house.		
6,120			22,324			5,572			4		



TABLE II.—CASES OF INFECTIOUS DISEASES  
NOTIFIED DURING THE YEAR 1911.

Notifiable Disease	NUMBER OF CASES NOTIFIED.							
	At all Ages	Un- der 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and up- wards
Small-pox ... ..	...	...	...	...	...	...	...	...
Cholera ... ..	...	...	...	...	...	...	...	...
Diphtheria (includ- ing Membranous Croup) ... ..	21	...	7	13	...	1	...	...
Erysipelas... ..	11	...	1	...	...	2	5	3
Scarlet Fever ...	10	...	4	6	...	...	...	...
Typhus Fever ...	...	...	...	...	...	...	...	...
Enteric Fever ...	5	...	...	1	1	1	2	...
Relapsing Fever...	...	...	...	...	...	...	..	...
Continued Fever	...	...	...	...	...	...	...	...
Puerperal Fever...	...	...	...	...	...	...	...	...
Plague ... ..	...	...	...	...	...	...	...	...
Phthisis (under Tuberculosis Regulations, 1908) ... ..	8	...	...	...	...	4	4	...
Varicella ... ..	25	4	14	6	...	1	...	...
Totals... ..	80	4	26	26	1	9	11	3

## TABLE III.—INFANTILE MORTALITY

NETT DEATHS FROM STATED CAUSES AT

CAUSE OF DEATH.					Under 1 week	1-2 Weeks	2-3 Weeks
All causes	{ Certified	...	...	..	8	..	1
	{ Uncertified	...	...	...	1	..	..
{ Small-pox ... ..					...	...	..
{ Chicken-pox ... ..					...	...	..
{ Measles ... ..					...	...	..
{ Scarlet Fever ..					...	...	..
{ Diphtheria and Croup					...	...	..
{ Whooping Cough ...					...	...	..
{ Diarrhœa ... ..					...	...	..
{ Enteritis ... ..					...	...	..
{ Tuberculous Meningitis					...	...	..
{ Abdominal Tuberculosis ( <i>b</i> )...					...	...	..
{ Other Tuberculous Diseases...					...	...	..
{ Congenital Malformations ( <i>c</i> )					2	...	..
{ Premature Birth ... ..					2	...	..
{ Atrophy, Debility, and Marasmus...					1	...	1
Atelectasis ... ..					...	...	..
Injury at Birth ... ..					...	...	..
Erysipelas ... ..					...	...	..
Syphilis ... ..					...	...	..
Rickets ... ..					...	...	..
Meningitis ( <i>not Tuberculous</i> )					...	...	..
Convulsions ... ..					...	...	..
Gastritis ... ..					...	...	..
Laryngitis ... ..					...	...	..
Bronchitis ... ..					...	...	..
Pneumonia (all forms)					...	...	..
Suffocation, overlying					...	...	..
Other Causes... ..					4	...	..
					9	...	1

Nett Births in the Year—legitimate, 414; illegitimate, 14.

## DURING THE YEAR 1911.

## VARIOUS AGES UNDER 1 YEAR OF AGE.

3-4 Weeks	Total under 1 Month	1-3 Months	3-6 Months	6-9 Months.	9-12 Months	Total Deaths under 1 Year.
3	12	16	8	5	2	43
..	1	..	2	..	..	3
..	..	..	..	..	..	..
..	..	..	..	..	..	..
..	..	..	..	..	..	..
..	..	..	..	..	..	..
..	..	1	1	1	..	3
..	..	1	..	1	..	2
..	..	1	..	..	..	1
..	..	..	1	1	1	3
..	..	..	..	..	..	..
..	2	..	..	..	..	2
1	3	1	1	..	..	5
1	3	5	..	..	..	8
..	..	..	..	..	..	..
..	..	..	..	..	..	..
..	..	..	..	..	..	..
..	..	..	..	..	..	..
..	..	..	..	..	..	..
..	..	..	1	..	..	1
..	..	..	..	..	..	..
..	..	6	1	..	..	7
..	..	1	..	2	1	4
..	..	..	..	..	..	..
1	5	..	5	..	..	10
3	13	16	10	5	2	46

Nett Deaths in the Year of legitimate infants—44; illegitimate—2

TABLE IV.—CAUSES OF, AND AGES AT DEATH  
DURING THE YEAR, 1911.

CAUSES OF DEATH.	Nett deaths at the subjoined ages of "Residents" whether occurring within or with out the District.									Total Deaths whether of "Resi- dents" or Non-resi- dents" in Instituti <sup>ns</sup> in the District.
	All Ages	Un- der 1 year	1 and und'r 2 yrs.	2 and und'r 5	5 and und'r 15	15 and und'r 25	25 and un- der 45	45 and un- der 65	65 and up- w'ds	
All causes { Certified { Unc'rtifi'd	335 8	43 3	17 1	11 ...	18 ...	12 1	49 1	103 1	82 1	335 8
Enteric Fever ...	3	...	...	...	...	...	1	2	...	3
Small Pox ...	...	...	...	...	...	...	...	...	...	...
Measles ...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever ...	...	...	...	...	...	...	...	...	...	...
Whooping Cough ...	6	3	3	...	...	...	...	...	...	6
Diphtheria and Croup	3	...	...	...	3	...	...	...	...	3
Influenza ...	5	...	...	1	...	...	2	2	...	5
Erysipelas ...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Fever	...	...	...	...	...	...	...	...	...	...
Phthisis (Polmonary Tuberculosis	21	...	...	...	...	6	8	7	...	21
Tuberculous M'ningitis	8	3	...	2	2	...	1	...	...	8
Other Tuberculous Diseases ...	4	...	1	...	1	1	...	1	...	4
Rheumatic Fever ...	2	...	...	...	1	...	...	1	...	2
Cancer (malignant disease)	10	...	...	...	...	...	1	5	4	10
Bronchitis ...	33	7	2	1	2	...	2	7	12	33
Broncho-Pneumonia...	17	4	3	5	...	...	...	5	...	17
Pneumonia (all other forms)	17	...	...	2	...	...	7	7	1	17
Other diseases of Respiratory Organs	...	...	...	...	...	...	...	...	...	...
Diarrhoea & Enteritis	10	3	2	...	...	...	3	2	...	10
Appendicitis and Typhlitis	1	...	...	...	...	...	1	...	...	1
Alcoholism ...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of Liver ...	2	...	...	...	...	...	1	1	...	2
Nephritis and Bright's Disease	9	...	...	...	...	...	3	4	2	9
Puerperal Fever ...	...	...	...	...	...	...	...	...	...	...
Diseases & Accidents of Parturition ...	6	...	...	...	...	...	6	...	...	6
Premature Birth ...	15	15	...	...	...	...	...	...	...	15
Violent Deaths ...	7	...	...	...	...	...	2	4	1	7
Suicides... ..	3	...	...	...	...	...	2	1	...	3
Other defined diseases	1	...	...	...	...	...	...	1	...	1
Diseases unknown ...	160	11	7	...	9	6	10	55	62	160
All Causes ...	343	46	18	11	18	13	50	104	83	343



BOROUGH OF BACUP.

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# ANNUAL REPORT

OF THE

## SANITARY INSPECTOR,

**ARTHUR E. BARNES,**

A.M.R.S. Inst. (by exam.) ;  
Member of Incorp. Assoc. San. Inspectors.  
Hons. Cert. Plumbing, Hygiene, &c.

**For the Year ended December 31st, 1911.**

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BACUP :  
Albert Booth, Printer, 19, St. James' Street,



ANNUAL REPORT  
OF THE  
SANITARY INSPECTOR  
FOR 1911.

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*To His Worship the Mayor (Alderman J. C. Hoyle),  
Mr. Alderman Maden, Deputy Mayor (Chairman),  
and Members of the Health Committee of the  
Corporation of the Borough of Bacup.*

GENTLEMEN,

I have the honour of submitting to you my Tenth Annual Report, giving details of the work done by the Sanitary Department during the year 1911.

INSPECTION OF THE BOROUGH AND REMOVAL OF NUISANCES.

As in previous years, regular inspections of the courts, yards, and passages within the Borough have been made, and the nuisances discovered during such inspections have been dealt with in accordance with the provisions of the various Health Acts.

The nuisances discovered were of a varied nature, many being of such a character as to require no structural alteration to property to procure their abatement; therefore, in many instances, verbal intimation to the persons responsible was sufficient to bring about the desired result. In cases, however, where the nuisances arose



from structural defects, or from the absence of sanitary appliances, the usual statutory notices were served upon the owners.

From the perusal of this report it will be seen that a large amount of work is being done, when it is considered that the work of the Sanitary Department increases each year.

#### SUMMARY OF WORK.

Visits and Re-visits to Houses	...	...	...	1703
Notices and Letters served	...	...	...	593
Workshop Inspections	...	...	...	139
Slaughter-houses and Offensive Trade Inspections	...	...	...	426
Cowsheds Inspections	...	...	...	136
Rooms Disinfected, including 2 Schools, 1 Cowshed and one 1 Stable	...	...	...	124
Drains Tested (by smoke)	...	...	...	44
Complaints received	...	...	...	59
Visits to Fried Fish Shops	...	...	...	39
Visits paid to Infected Houses	...	...	...	171
Smoke Observations	...	...	...	40

#### NUISANCES ABATED.

Foul Drains cleansed	...	...	...	33
Cesspools abolished (Water Closets provided)	..			6
Pail Closets abolished (Water Closets provided)				93
Defective Drains to repair	...	...	...	8
Gable Ends Damp (to cement)	...	...	...	3
Drainage from Manure Tanks flowing over Highway				1
Defective Soilpipes to repair	..	...	...	3
Privy Closets abolished ( W.C.'s provided)			...	3
"      "      "      ( Pails      "      )			...	2
Open Area and Ventilation to Cellar provided			...	2

#### NUISANCES ABATED—continued.

Privy Closet discharging into river, W.C's fixed	...	1
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Rabbits kept in dwelling to remove ... ..	1
Disused Closets to remove .. ...	2
Offensive Cellar Areas to fill in ... ..	2
Delapidated Privy Doors and Frames (new ones fixed) ... ..	7
Delapidated Slaughter-house Floor (floors repaired)	3
Delapidated Closet Seats (new ones fixed) ... ..	5
Defective Waste Water Closets (stopped-up) ...	16
Depositing Ashes and Refuse in Brook ... ..	2
New Pedestal Water Closets fixed ... ..	5
Delapidated House Floors (re-laid) ... ..	4
„ „ „ (to repair) ... ..	9
Delapidated Sinkstones (new ones fixed) ... ..	9
Delapidated Surface of Yards re-laid with flags ...	4
„ „ „ to level and repair ...	2
Dilapidated Privy Roofs and Walls to repair ...	2
Closet Doors broken off (new doors fixed) ... ..	9
Dirty Closets to cleanse ... ..	31
Offensive Rubbish in Cellars to remove ... ..	1
„ „ House „ ... ..	1
Dirty Dwellings to cleanse .. ...	17
Dirty Bedrooms to cleanse ... ..	9
Slaughter houses to cleanse... ..	1
Offensive Trade Premises (to whitewash) ... ..	2
Fall Pipes stopped up (cleansed) ... ..	9
Offensive Deposits to remove ... ..	6
Insufficient Ashpits (ash-bins provided) ... ..	135
Additional Water Closets provided ... ..	3
Cooking Fish unsuitable room (to discontinue) ...	2
Defective Stable Drains to repair ... ..	2
„ Closet accommodation ... ..	1

NUISANCES ABATED—continued.

Nuisance from Black Smoke ... ..	1
Dilapidated Manure Pit to repair ... ..	1

NUISANCES ABATED—continued.

Defective Drains under Buildings (drains removed)	14
"        "        "        "        ( " re-laid) ...	3
Dilapidated House Roofs repaired ... ..	17
Dilapidated Spouting and Fall Pipes (new ones fixed)	28
Dilapidated Bedroom Floor (new floor to fix) ...	1
"        "        Floors to repair ... ..	3
Gullies and Dish-stones fixed to drains ... ..	3
Cellar Floors to level and repair ... ..	3
Defective Cellar Drains cleansed and repaired ...	2
Defective Closet Basins (new ones fixed) ... ..	2
Dilapidated Closets to re-build . ... ..	—
Dilapidated Closet Boxes (Sanitary Pails provided)	4
Sinkwaste Pipes disconnected from Drains (gullies and 18in. channels fixed)... ..	64
Sinkwaste Pipes stopped-up (cleansed) ... ..	7
Foul Fresh-water Closet Drains (cleansed) ... ..	5
Fall Pipes disconnected from Drains... ..	10
Premises overcrowded ... ..	3
Defective Sinkwaste Pipes (Lead Traps fixed) ...	3
"        "        "        (new ones fixed) ...	11
Pigeons kept in Attic to remove ... ..	2
Defective Closet Cisterns ... ..	2
Defective Lavatory, Waste Pipe ... ..	1
Stagnant Water in Cellar ... ..	1
Offensive Refuse in room under House to remove ...	1

DRAINS TESTED (by Smoke).

<u>No. of Premises, 53</u>	<u>No. of</u>	
<u>Nature of Defects.</u>	<u>Defects</u>	<u>Work carried out.</u>
	<u>Found.</u>	
Drain untrapped ... ..	2	Gully Traps and Dishstones fixed
Defective Drains in Cellar	9	Drains disconnected from Sewer

Defective Drain in Cellar	1	Drain repaired, Gully and Channel fixed in area outside
Defective Drains with Iron Traps .. ..	2	New Gully Traps and Channels fixed
Defective Soilpipes ...	2	New length fixed
Sinkwaste Pipes connected direct to Drains ...	5	Sinkwaste Pipes disconnected, Gullies and Channels fixed
„ „ in Cellars	3	„ „ outside
Defective Drains passing direct under Dwelling	1	Drains disconnected from Sewer
„ „ „	1	New Drain laid
Fall Pipes connected direct into Drains ... ..	11	Fall Pipes disconnected Gully Traps fixed
Fall Pipes blocked ...	5	
Defective Joints between Closet and Soilpipe (Putty Joints)	3	

During the year I have submitted the following Reports to the Health Committee, viz:—

Report *re* Shute, Britannia.

Report *re* Goit Stacksteads.

Report *re* Smoke observation.

Report *re* Tips.

Report *re* Proposed Premises to be used for an offensive Trade.

#### MEAT AND FOOD INSPECTION.

Frequent inspections have been made of premises and shops where food is prepared or kept for sale, and in six instances the food which came under my observation was found to be unsatisfactory. In each instance the articles were destroyed by consent of the owner upon attention being called to the condition of the food.

Article	Quantity
Roast Pork ... ..	2½ lbs.
Potted Meat ... ..	40 lbs.
Tripe ... ..	50 lbs.
Livers ... ..	40 lbs.
Beef and Pork ... ..	120 lbs.
Carcase of 1 Pig ...	240 lbs.

During the year special attention was given to food-stuffs preserved in tins. Several shops were visited and tins taken from stock were inspected. In every case I found a willingness on the part of each tradesman to assist in this inspection. No "Blown" tins were observed.

The whole of the butchers, fishmongers, fruiterers, and other tradesmen's premises have been kept under close and frequent supervision; also, the market has been visited twice weekly.

#### SLAUGHTER HOUSES.

##### No. on Register, 16.

The Slaughter-houses in the Borough have been periodically inspected. Some of the Slaughter-houses are in congested areas, and structurally not suited for the purpose, otherwise the premises are kept clean, and at the time of my inspections the slaughtering was done so as to prevent as far as the nature of the trade would allow, any effluvium nuisances. Several improvements have been effected at the slaughter-houses during the year. The question of gut-scraping in the slaughter-houses, as mentioned in my Report last year, has received your attention, and the letter sent to the Butchers asking them to discontinue this practice, has been of service.

I still find a few butchers are in the habit of having

their meat taken from their slaughter-houses on carts, etc., without any covering, thus allowing the dust and rain to fall upon it. It would be more satisfactory if coverings in all cases of removal were provided. If this is done it will be both to the butchers' as well as to the consumers' advantage.

The difficulties in the way of food inspection are great as regards meat. The slaughter-houses in the Borough are scattered, slaughtering being done at irregular times and hours.

In connection with this point, I would suggest to the Committee the desirability of an early consideration of the question as to the provision of a Public Abattoir. In view of the difficulties liable to be experienced in the prompt and effective discovery of unsound meat, I think it will be generally agreed that the provision of a public slaughter-house for a large district such as ours is a question well worth considering, and I would commend it to your notice. The necessarily superior conditions under which meat would be prepared, and the corresponding benefits likely to accrue to the public would, I feel sure, be very great whilst it would render the sanitary supervision of the meat supply far less difficult.

Fifty-eight permits have been granted during the year, allowing persons to slaughter the following animals on premises not licensed as slaughter-houses viz ;—Pigs 85, Cows 1, Sheep 7, Lambs 13. I am strongly of opinion, that this privilege is likely to be abused, also your Inspector cannot supervise these premises as satisfactorily as the slaughter-houses, still we have some knowledge when and where the slaughtering takes place.

#### OFFENSIVE TRADES.

Number on Register—Tripe Boilers	...	...	3
----------------------------------	-----	-----	---



Knackers' Yard ... .. 1

The premises in occupation have been regularly inspected, and so far as the nature of the trade would allow, kept in a clean condition, the Bye-laws being strictly enforced. One application for license for use of premises as tallow melter was received, and was favourably considered by the Committee.

#### FRIED FISH SHOPS.

There are 33 shops in the Borough for the sale of Fried Fish and Chip Potatoes.

Inspection of these premises were made during the year—the majority were found clean and well fitted-up. Your Inspector occasionally receives complaints from people living near these premises regarding the smells but when sound fish and good materials are used, and cleanliness observed, considering the advantages they offer of a cheap, wholesome, ready-prepared food, little exception can be taken to the manner in which they are conducted. Inspection of the fish and other materials used were made at intervals, and in each case they were found satisfactory. Fish and chips are articles of diet consumed to no small extent in the town, and they should always be prepared only under hygienic conditions and sanitary surroundings. The operation of special administrative powers—namely, Bye-laws—would enable your Inspector to be more exacting in his demands for that purpose, and would establish a uniform system of supervision.

#### POTTED MEAT AND SAUSAGE MAKERS.

During the year the premises in which Sausages, Potted Meats and Foodstuffs were made, were visited. In each case the utensils were found to be clean, the occupiers trying to produce these foodstuffs as cleanly as possible.



Some of these premises were not made for the work carried on and cannot be called ideal places for the purposes to which they have been put. I consider it is of the greatest importance that all foodstuffs should be prepared under the most hygienic conditions possible. Several nuisances have been abated at these premises during the year.

During the two outbreaks of Food poisoning occurring in the Borough during the year, I spent a large amount of time in investigating and making inquiries respecting the cases, taking samples of air, etc., from the premises where the foodstuff had been prepared and sold.

#### THE PUBLIC SANITARY CONVENIENCES,

##### BANK STREET.

Some complaints were received during the year respecting the locks being out of order, but if persons using these places exercised more care, complaints would be reduced. During the whole year one closet has been left open for the use of females. A few complaints were received respecting this closet, but considering we have no female attendant during the day, the leaving of one closet open has worked fairly well.

##### SMOKE NUISANCES.

Thirty-eight observations, each of a half-hour's duration, and two of an hour's duration, were made. The average number of minutes of black smoke emitted was  $2\frac{1}{2}$  minutes per half-hour, and  $9\frac{1}{2}$  minutes in the hourly observations, the highest number being 16 minutes in the hour. In each case, after an observation has been taken, I visit the boiler-house, see the manager, or fireman, and draw their attention to the amount of smoke emitted.

Whatever mechanical or automatic apparatus is provided to prevent or consume black smoke, unless attention and care is given to them, they will prove failures so far as preventing or consuming black smoke is concerned. Improvement could be effected if firemen would exercise greater care during the process of firing. As the Committee have fixed a time limit for the emission of black smoke better results should be observed in the future. As will be observed, an improvement has been effected during the year, when compared with the previous year.

#### VANS USED AS DWELLINGS.

The dwelling vans of showmen who visited the town for the purpose of attending the fair, and also some who visited Stacksteads, were all inspected in order to ascertain their sanitary condition, and also for the purpose of observing any cases of sickness which might exist among the inmates. The condition of the vans was satisfactory, and no cases of sickness were found to exist among the occupiers. Total number of living vans inspected, 23.

#### FACTORY AND WORKSHOPS ACT, 1901.

We have on our Register the following workshops—120, and 5 workplaces. Some premises which were formerly used as workrooms, are closed for the lack of occupiers and some have discontinued using them.

One hundred and thirty-nine visits have been paid under the above Act, and several defects noted, and improvements effected. Twelve notices were served. In other cases the owners' or occupiers' attention was directed to the defects observed. Five complaints respecting defects in Factories were received from H.M. Inspector, which received attention.

FACTORY AND WORKSHOPS ACT, 1901—continued.

<u>Particulars.</u>	<u>DEFECTS.</u>	<u>No. of Defects Found.</u>
<i>Nuisances under the Public Health Acts—</i>		
Defective Lavatory Waste Pipe ... ..		1
New Fallpipes and Spouting to fix ... ..		1
No Ashpit accommodation ... ..		2
Foul drains cleansed (Urinal) ... ..		1
Foul drains cleansed (W.C.) ... ..		1
<i>Sanitary Accommodation—</i>		
No Closet accommodation ... ..		1
To provide Closet accommodation for females ..		1
Pail Closet to abolish and provide W.C. ...		1
Dirty Closets cleansed and whitewashed ...		7
Dilapidated Closets to repair ... ..		1
Cesspool Closets to abolish and provide 8 Water Closets (not completed) ... ..		1
<i>Offences under the Factory and Workshops Act—</i>		
Floors to repair ... ..		2
Bakehouses to whitewash ... ..		3
Closets to screen (2 Closets screened) ... ..		1
Workshop to whitewash ... ..		1
To screen Urinals... ..		1
Defective roof to repair... ..		1
Offensive effluvia from Closets entering Factory to provide Ventilator ... ..		1

*Homework—*

Three lists of out-workers were received from occupiers, and one from an adjoining Council.

We have on our Register the names and addresses of 11 outworkers. This is less than last year, caused by the work from the slipper trade not being sent out as usual.

The out-workers of our Borough are persons who take in slippers to make at home. This work is chiefly earried on in the kitchen or living-room. At the time of my Inspection these premises were found in a clean condition.

We have on our Register five work-places, viz.:—

Kitchens of Restaurants	..	...	4
Livery Stable Yards	...	.	1

In all cases I found a willingness on the part of the owners and occupiers to carry out any suggestion made respecting the sanitary improvement of their premises, all the defects complained of being attended to or reeeiving attention.

#### HOUSING AND TOWN PLANNING ACT, ETC., ACT, 1909.

Twenty baek-to-baek houses were reported upon.

#### DAIRIES, COWSHEDS AND MILKSHOPS ORDER, 1885,

#### AND REGULATIONS, 1907.

We have on our Register 128 Cowkeepers and Milk-sellers.

During the year 136 inspections were made. Three farmers supply Milk in our Borough from an adjoining district. Five applications for Registration as Cowkeepers and one application as Milkseller have been made during the year; 5 Cowkeepers and 1 Milkseller being registered. The Cowkeepers registered are using premises previously occupied by Registered Cowkeepers.

I find a common practiee amongst some of our people, is that of placing their jugs, etc., outside their premises, so that the Milkman can put the milk in them. It is very important in these cases that the jugs should be placed in such positions as not to catch dust or absorb foul gases.

The following work has been carried out during the year :—

Manure pit adjoining Cowshed door to remove and provide new one...	...	...	...	1
Dairies ventilated and Lights provided ..	...	...	...	14
Cowsheds ventilated	...	...	...	15
Dairy Floor repaired	...	...	...	2
Badly lighted Cowsheds (14 lights provided)	...	...	...	9
Cowshed Floor relaid	...	...	...	7
Cowshed Floors repaired...	...	...	...	2
Drains inside Cowsheds removed, Drains fixed outside	...	...	...	8
" in areas outside	...	...	...	3
Privy Midden Closet, new Cowshed door to abolish	...	...	...	1
Cowshed Walls to repair ..	...	...	...	2
Cowsheds to cleanse and whitewash	...	...	...	3
Dairies to whitewash	...	...	...	1
Surface of Yards to level and repair	...	...	...	2
Dirty Utensils to clean	...	...	...	2
Unregistered	...	...	...	6
New Drains to Cowsheds provided	...	...	...	4
Dilapidated Cowsheds (new interior required)	...	...	...	4
New Spouting and Fallpipes fixed	...	...	...	4
Fallpipe disconnected from Drains, Gullies, and Dishstones fixed	...	...	...	5
Unsatisfactory Water Cistern, to provide new one	...	...	...	1
New Manure Pits provided	...	...	...	3
Piggeries re-drained and repaired	...	...	...	8
Dilapidated Pigstye floor, new ones required	...	...	...	2
Dilapidated Pigstye to abolish (new one provided)	...	...	...	1
Liquid from Manure Tank flowing over farm- yard	...	...	...	1
" " " " highway	...	...	...	1
Pigs kept in Cowsheds	...	...	...	1

Unsatisfactory Water Supplies ... ..	2
Cowshed Roofs to repair ... ..	4
Gable end to cement ... ..	1

#### INFECTIOUS DISEASES.

The following number of Infectious Diseases were reported during the year :—

	1910	1911
Chickenpox ... ..	45	25
Scarlet Fever .. ...	89	10
Typhoid Fever ... ..	4	5
Diphtheria (Mem. Croup) ... ..	16	21
Erysipelas ... ..	21	11
Puerperal Fever ... ..	1	0
	<hr/> 176	<hr/> 72

One hundred and seventy-one visits were made to infected houses, enquiries made as to the cause or origin of the disease, instructions given with regard to the isolation of the infected persons, and disinfection of the infected articles, etc., connected with the disease. Sanitary Pails, Disinfectants, and Carbolic Oil are supplied free. The Schools are sprayed with Izal or Formalin Disinfectant. Also Disinfectant Sawdust is supplied to the Schools on request.

In case the infected person was a child attending school, the school authorities were informed, and instructions given to keep all children from school until the medical attendant certified the children to be free from infection. Some parents believe that children have to graduate through the various infantile diseases, and with this belief expose them to infection so as to have it all over together. One hundred and twenty-four rooms including twenty Schools, one cowshed and one stable have



been disinfected. Sixteen houses in which had been cases of Phthisis were visited, and an offer made to disinfect. In only four cases was the offer accepted. 83 books have been fumigated and returned to their owners. Several parcels of lead pencils from the Schools have been disinfected, and 7 beds, 4 mattresses, and 1 bedstead on the application of the owners have been destroyed. As the requests from the occupiers of houses for the destruction of mattresses and beds are increasing yearly, and the difficulties of burning them on our tips are great, some other means of destruction should be provided.

The free supply of disinfectants in the Borough has been duly appreciated. In some instances I find that disinfectants have taken the place of cleanliness. When the occupiers' attention was called to this matter, disinfectants were not so freely used, but search was made for any offensive smell, and the cause of same was removed, instead of being covered up.

From my inspections during the year I find that the people are taking a greater interest in matters relating to sanitation in and around their dwellings, and from this increased interest, improvement in the health of the parents and children must be effected.

#### STEAM DISINFECTOR AND CLEANSING STATION.

Previous to the year under report it has been the rule to disinfect bedding, bedclothes, etc., by Sulphur Dioxide or Formic Aldehyde Gas at the houses in which cases of infectious diseases had occurred. It is now the practice to remove on request or with the consent of the owners, bedding, clothing, etc., after cases of infectious diseases, to the Steam Disinfector for disinfection. During the year articles have been removed, disinfected and returned to the owners, from houses in which had been cases of Diphtheria, Typhoid Fever, Cancer and Verminous children. Also some children have been



taken to the cleansing station and washed and cleansed by the lady attendant. During the time children are being washed their clothes are being disinfected in the Steam Disinfector. When the advantages of Steam Disinfection are better known amongst our people, more use will be made of the Disinfector.

#### ARTICLES DISINFECTED.

Mattresses (Wool)	...	...	...	5
Beds	...	...	...	6
Quilts	...	...	...	2
Sheets	...	...	...	4
Pillows	...	...	...	16
Suits of Clothes (Boys)	..	...	3	
Sundry small Articles...	..	...	35	
				<hr/> 71 <hr/>

#### NUISANCE FROM RATS.

“Virus” was used on the tips in the Borough during the summer. The results were not quite so satisfactory as when used two years ago.

#### CLEANSING DEPARTMENT.

As in previous years, I have visited each part of the Borough, and am well acquainted with the Sanitary condition of the differently constructed Privies and Ashpits. These are being reduced, and the Water Carriage system adopted. The weekly and bi-weekly collection of shop refuse in the central portion of the town has been well sustained, and I think has given general satisfaction. The present system of depositing the ashes in small boxes, bags, tubs, etc., (which by courtesy are called ash-bins) on the footpaths until emptied by our men, does not assist in making our town sanitary, and I believe the time is not

far distant when these receptacles will be abolished. Ash-tubs and boxes are far too frequently dangerous for the workmen to handle, owing to the rusty nails and broken hoops; and also they are very insanitary. During the year I have observed that wooden boxes and tubs soon become saturated with moisture, and get in a very offensive condition. Portable circular galvanised iron ash-bins, with covers, are better in every way. The Committee having adopted a circular galvanised iron "Regulation" Dust-bin, with cover, I am convinced, from a large experience, that when these are generally used for houses, etc., a great sanitary improvement will be effected. During the year 135 "Regulation" Dust-bins have been provided. The objections which were raised against the bin adopted by the Committee are decreasing as the people get more experience of them. As will be seen by the number provided the dust-bin which the Committee adopted is proving satisfactory, and gaining favour, there being less difficulty in having them provided than formerly. When the bins are generally adopted in the Borough, I think greater efficiency in the removal of house refuse will be observed. No greater improvement can be seen yet, as the bins are distributed in different parts of the Borough. Every application received for the emptying of Ashpits, Cesspools, or Pails is duly recorded in a book. During the year 43 such applications were made, which were attended to. The efforts I am making to dispose of the nightsoil in a more sanitary manner in preference to "dumping" it on the tips has, so far as disposing of it is concerned, been more satisfactory, more nightsoil having been put down the shutes than in any previous year. Several complaints were received during the year *re* smells from sewers and tips, caused by the nightsoil; these complaints will only decrease as the Pail Closets and Cesspools are abolished and the water carriage system becomes more generally adopted. The only practical way to abate the nuisance

arising from the disposal of pail contents on tips or shutes, is by adopting the W.C. system. Nearly all of the outlying districts are scavenged by ourselves. As opportunities occur we try to undertake this work by our own staff and without any increased cost.

The re-arrangement of cleansing, which was effected in the latter part of 1910 at Britannia has had a fair trial, and has, so far as work is concerned, been satisfactory. A great sanitary improvement will be effected in this District when all the closets are converted to the water-carriage system, and we can discontinue taking a barrel out for the collection of nightsoil. Some complaints were received respecting the depositing of nightsoil down the sewer.

In the Weir district I have made temporary arrangements with the farmers to take the nightsoil we collect there; this will relieve us for a time and allow us to proceed with the conversion of closets in the Britannia district.

During the year the increased amount of trade refuse removed has been sustained. This is probably due to the fact that a charge is being made to those who previously had it removed free. A few complaints have been received respecting charges for trade refuse, but when it is considered that a charge must be made, and this refuse is being removed at low cost, I do not see how these complaints will be avoided.

The task of removing and dealing with domestic refuse has specially received the attention of your Inspector during the year, and though the number of houses we collect from has increased since my appointment, the work has on the whole been satisfactorily carried out. If a weighing machine could be provided on the tip at Change, and all refuse weighed, it would soon pay for itself, as well as effect a saving in

cleansing. From my experience I find that more efficient and better work is done when each load is weighed, and I am strongly of the opinion that for the amount we pay for team labour and the class of horse we have, more refuse should be removed than is at present. This could be done by the provision of larger carts and the refuse being pressed down. If this was done a saving could be effected in this part of my work.

The abolition of the conservancy system, and the adoption of water carriage system for refuse removal is rapidly becoming general throughout the country, and wherever the sewers are satisfactory your Inspector would advise that the abolition of all closets so constructed as to retain excrementious matter around houses be rigidly enforced, and clean Water Closets substituted, as it is becoming more apparent that the water carriage system proper is the only alternative.

I would strongly urge the Committee to consider the question of obtaining a loan, so as to push forward the work of converting the Pail Closets, wherever possible, to the water carriage system. The money we provide each year towards conversions, and the amount we spend in collecting and repairing pails and disposing of the night-soil, would go a long way towards redeeming the loan, as well as effecting a great sanitary improvement, and I am convinced, after a long experience, that this is the only effectual manner in which to deal with the complaints arising from our Sewers when we deposit nightsoil down them all other ways being merely palliative. As the Health Committee makes a grant of part costs for conversion of Pail Closets in suitable places, and allows free water to one closet, one would have expected that this privilege would

have been better appreciated. I think all responsible persons should avail themselves of the Committee's offer, and provide Water Closets, in place of Pails, which are very insanitary, when it is considered that, not only has the excrement to remain about the houses, polluting the air, then collected and carted through the town, and has to be disposed of by depositing on tips, or putting down the sewers, which is simply removing the "source" of nuisance from one place to another. Clean Water Closets are being adopted in lieu of Waste Water Closets, as Waste Water Closets are not as sanitary. It was claimed for these closets when they were introduced, that a great saving of fresh water would be effected through being flushed with slop water. but practical experience has shown that this is not the case.

The condition of the cesspools, privies etc, abolished during the year were extremely unsatisfactory and dangerous to health. The change in the districts where Water Closets have been provided is giving much satisfaction to the inhabitants. Greater efficiency and better satisfaction would arise from the use of Water Closets if occupiers would exercise care during the hard frosty weather, by turning off the water, so as to minimise as far as possible the tendency for the water in the pipes to freeze, thus causing needless expense to the owners, as well as annoyance to themselves. The abolition of all Pail Closets in the Borough is a question which should receive the early consideration of the Health Committee.

During my inspection I have found closets, and sanitary fittings in a very unsatisfactory condition, caused by the indifference of the occupiers. It is to their own advantage to see that closets and all sanitary fittings are cleansed and kept in good order. Some persons have an idea that closets

and sanitary fittings never require cleansing, with the result that they soon become a nuisance and annoyance to health. People do not seem to be aware that it is their duty to see that closet seats and floors must be regularly washed and cleansed, and all yards, passages and approaches thereto must always be kept clean and free from all ashes and dirt whatever, to the satisfaction of the Sanitary Inspector, in order to prevent a nuisance.

During the year I received several complaints respecting some hawkers being in the habit of depositing their fish offal and bad fruit on the streets and vacant lands in the borough. As it was a difficult matter to find out who did it, I wrote the various greengrocers and fishmongers asking them if they were in the habit of so doing, to discontinue the practice.





TABLE SHOWING NUMBER OF PAILS EMPTIED AND  
LOADS OF RUBBISH REMOVED EACH MONTH.

Month.		Pails & Cesspools	Loads Slaughter- house Refuse	Loads Vegetable Refuse	Loads Refuse Removed
January	... ..	6751	14	8	689
February	... ..	6451	14	8	519
March	... ..	8013	17·5	10	645
April	... ..	6979	14	8	505
May	... ..	7686	17·5	10	629
June	... ..	6439	17·5	8	469
July	... ..	5821	14	8	374
August	... ..	9317	17·5	10	706
September	... ..	6519	14	8	572
October	... ..	6410	14	8	525
November	... ..	7714	17·5	10	656
December	... ..	6366	17·5	10	528
Total 1911	..	84466	189	106	6817

Your Sanitary Inspector gratefully recognises the valuable assistance he has received from the ex-Mayor (Alderman J. H. Maden, Deputy-Mayor), Mr. Councillor Cropper, ex-Chairman; and Members of the Health Committee, in his endeavours to improve the sanitary condition of the Borough.

I remain, Gentlemen,

Your obedient Servant,

ARTHUR E. BARNES,

A.M.R.S. Inst. (by exam.); Member of Incorp. Assoc. San.  
Inspectors; Hous. Certs. Plumbing, Hygiene, etc.

Chief Sanitary Inspector.